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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,250	01/03/2002	Kevin D. Kroupa	A3648.0012/P333-A	4615

24998 7590 12/03/2003

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EXAMINER

WALTON, GEORGE L

ART UNIT PAPER NUMBER

3753

DATE MAILED: 12/03/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/034,250

Applicant(s)

KROUPA ET AL.

Examiner

George L. Walton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 26 and 30-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 26 and 30-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \*   c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 13.                      6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments with respect to claims 26, 30-33 and 39-46 have been considered but are moot in view of the new ground(s) of rejection. The previous rejections of claims 34-38 and 47-50 stand rejected as recited in the office action dated June 18, 2003. Note that the threaded piston unit is readable on elements 33, 34, 40, 46, 72, 74, 76, 82 and 84. The claimed torque is defined by the threaded elements 33-34, 82 and 84. It is clear that the movement of the lower valve seat 72 and 74 and the upper valve seat 76 are moved in an axial direction.

It is further noted that the examiner disagrees with the applicant that Brumm's two-stage opening valve does not teach a surge prevention dual-path valve. The surge prevention in Brumm is disclosed in column 1, lines 1-25 and column 2, lines 68-75 and column 3, lines 1-9. Also, in column 1, lines 5-12 teach other types of gases with oxygen, which is readable on nitrous oxide.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 34-38, 47 and 49 are rejected under 35 U.S.C. 102(b) as being anticipated by Brumm. See the previous office action recited above for the details of the claims. Note that the

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threaded piston unit is readable on elements 33, 34, 40, 46, 72, 74, 76, 82 and 84. The claimed torque is defined by the threaded elements 33-34 82 and 84. It is clear that the movement of the lower valve seat 72 and 74 and the upper valve seat 76 are moved in an axial direction. The surge prevention in Brumm is disclosed in column 1, lines 1-25 and column 2, lines 68-75 and column 3, lines 1-9. Also, in column 1, lines 5-12 teach other types of gases with oxygen, which is readable on the claimed nitrous oxide.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 26, and 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brumm in view of either one of Lamar or Wiegel. The above claims are readable on the patent to Brumm with the single exception of having a lower cup-shaped valve element with a recess for receiving a valve seat member. The patent to Lamar or Wiegel teaches the above exception. In view of the teaching of Lamar or Wiegel, it would be obvious to one of ordinary skill in the art,

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at the time the invention was made, to provide the above exception to the lower cup-shaped member 72 and 74 of Brumm as taught by elements 14-16 of Lamar or elements 10-11 of Wiegel, if desired. Such teaching provides no unobvious or unexpected result. The surge prevention in Brumm is disclosed in column 1, lines 1-25 and column 2, lines 68-75 and column 3, lines 1-9. Also, in column 1, lines 5-12 teach other types of gases with oxygen, which is readable on nitrous oxide.

Claims 39-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brumm. The rotation of the piston unit is defined by the threaded elements 33-34 and 40, which in turns causes axial movement of the piston unit as defined above. The manual actuator or handle 40 of Brumm achieves the limitation of claim 44. Note that the gas flow rate ranges and the piston unit rotation ranges are merely obvious design expedients in view of the teaching of Brumm. Since Brumm is a surge prevention valve unit, the flow rate ranges and the piston unit rotation ranges can vary depending on the environmental or utility use.

Claims 47-50 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Bathe et al in view of Brumm, in the same manner as applied in the office action dated June 18, 2003. Note that elements 20 and 22 are readable on the patient (20) and the face mask or utilization device (22).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to George L. Walton whose telephone number is 703-308-2596. The

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examiner can normally be reached on M-F , 8:00 -4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel can be reached on 703-308-1272. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7765.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0861.

  
**George L. Walton**  
**Primary Examiner**  
**Art Unit 3753**

G.L.W.